



saes
group

making **innovation happen**, together

Core Business

SAES® is an **advanced functional materials** Group, focusing its business on the development and production of proprietary and specifically engineered solution (components and systems) for many industrial and scientific applications.

The wide technological portfolio and the full vertically integrated production processes make SAES a **world leader** supplier of hi-tech, high quality solutions like:



- **Getters components and systems**

to guarantee the proper vacuum conditions, modified atmosphere or gas purity in a variety of applications spanning from consumer electronics up to scientific research areas

- **Nitinol based components**

for the healthcare market (minimal invasive surgery: e.g. stents)

- **Shape memory components and systems**

like actuators and valves for consumer electronics, automotive and white goods industries

- **Functional composites and coated films**

to protect goods for the packaging industry

70 years of World Wide leadership

For more than **70 years**, our **technology** has been supporting **innovation** in the:

- Information and Displays industry,
- Lamp industry,
- Vacuum and Ultra-high Vacuum applications,
- Vacuum tubes and electronic devices industry,
- Ultra-high gas purification,
- Renewable Energies area.

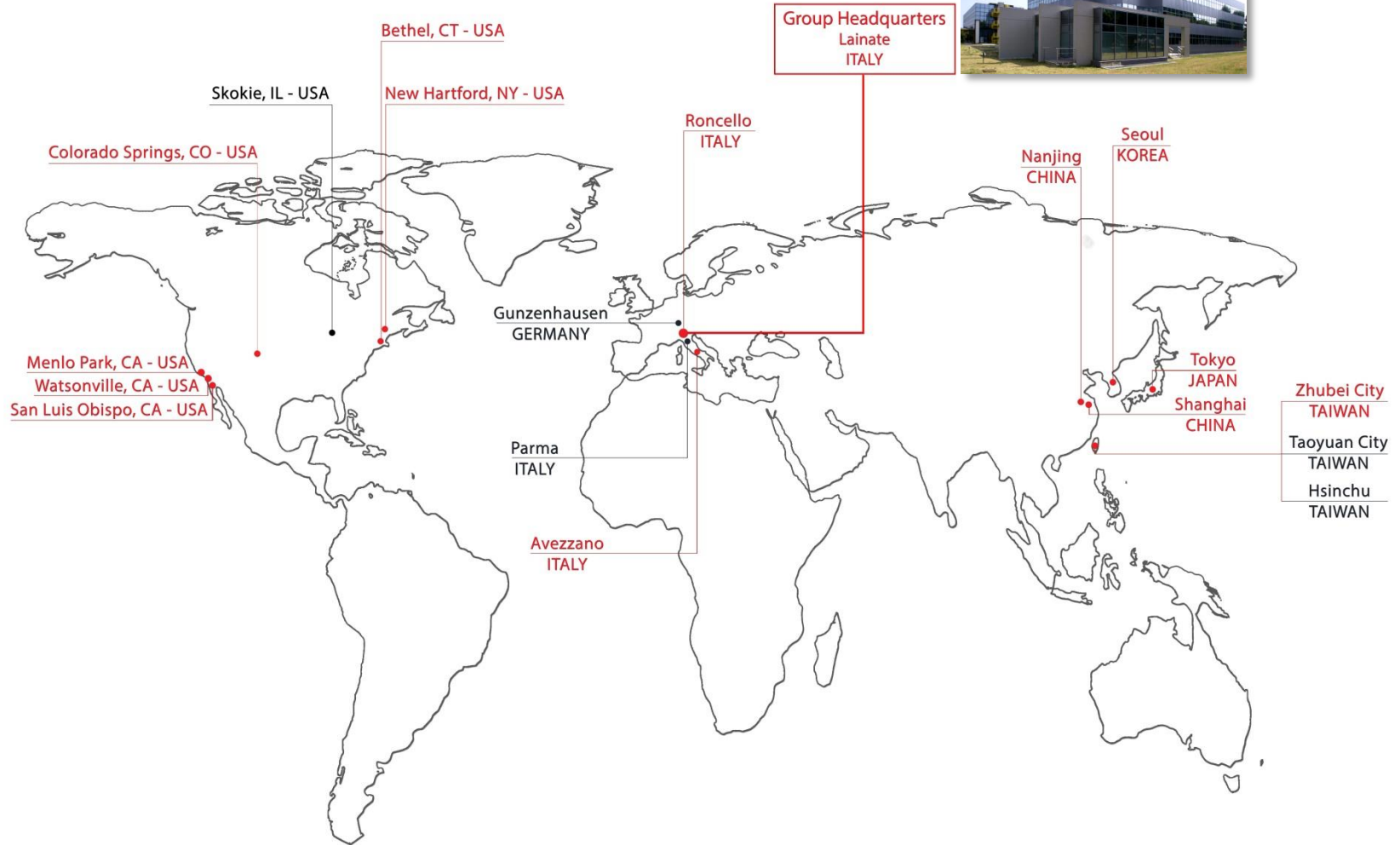
Since 2004 our **NiTi smart materials solutions** have been innovating:

- the Medical devices industry,
- the Consumer electronics industry,
- the Automotive industry,
- the White Goods and Domestic industries

Over the past 10 years we have developed a new generation of materials for gas management: the **functional polymeric composites**. And we are now also innovating the flexible packaging market through the creation of **functional coatings for the active packaging**.



Global Presence



SAES Group is present in the world with eleven manufacturing facilities, distributed across Europe and United States, and has an active sales and technical service network on a global scale.

making **innovation happen**, together

saes
group



A Global Quality Approach

Total Quality Management
is our key approach for Innovative,
safe and environmentally friendly
products development



Customer Satisfaction

for over 70 years is an
important, strategic goal
of our entire business system



saes
group

making innovation happen, together

Research & Innovation

a knowledge-intensive
approach to innovation
is the mission for
SAES people

- ▶ About 10% of net sales allocated to R&I
- ▶ 150 people engaged in R&I activities
- ▶ Over 300 inventions in 70 years

Group Core Competences

Key Core Competences

Advanced Metallurgy

Surface Science

Gas-Solid Interaction

Macro-molecular Chemistry



ADVANCED FUNCTIONAL MATERIALS

Functional Metals

Functional Chemicals

**saes
group**

making innovation happen, together

Our Functional Materials

Functional Metals

GETTER ALLOYS whose function is to capture gases in vacuum or gas stream

METAL DISPENSERS whose function is to release vapors of pure metals

SINTERED HEAT SINKS whose function is to dissipate heat

SHAPE MEMORY ALLOYS whose function is to recover their original shapes thus exerting a mechanical action

Functional Chemicals

INORGANIC & ORGANIC GETTERS whose function is to selectively capture gases and vapors in vacuum, modified atmospheres or gas streams

ADVANCED POLYMERS whose function is to control gases and vapors in combination with other functional properties

ADVANCED COMPOSITES whose function is to block or selectively control gases and vapor in combination with other functional properties

Our Products

ADVANCED FUNCTIONAL MATERIALS



PRODUCTS

COMPONENTS - products using

proprietary advanced materials as active elements and which are **used in systems** to perform the function for which they were designed



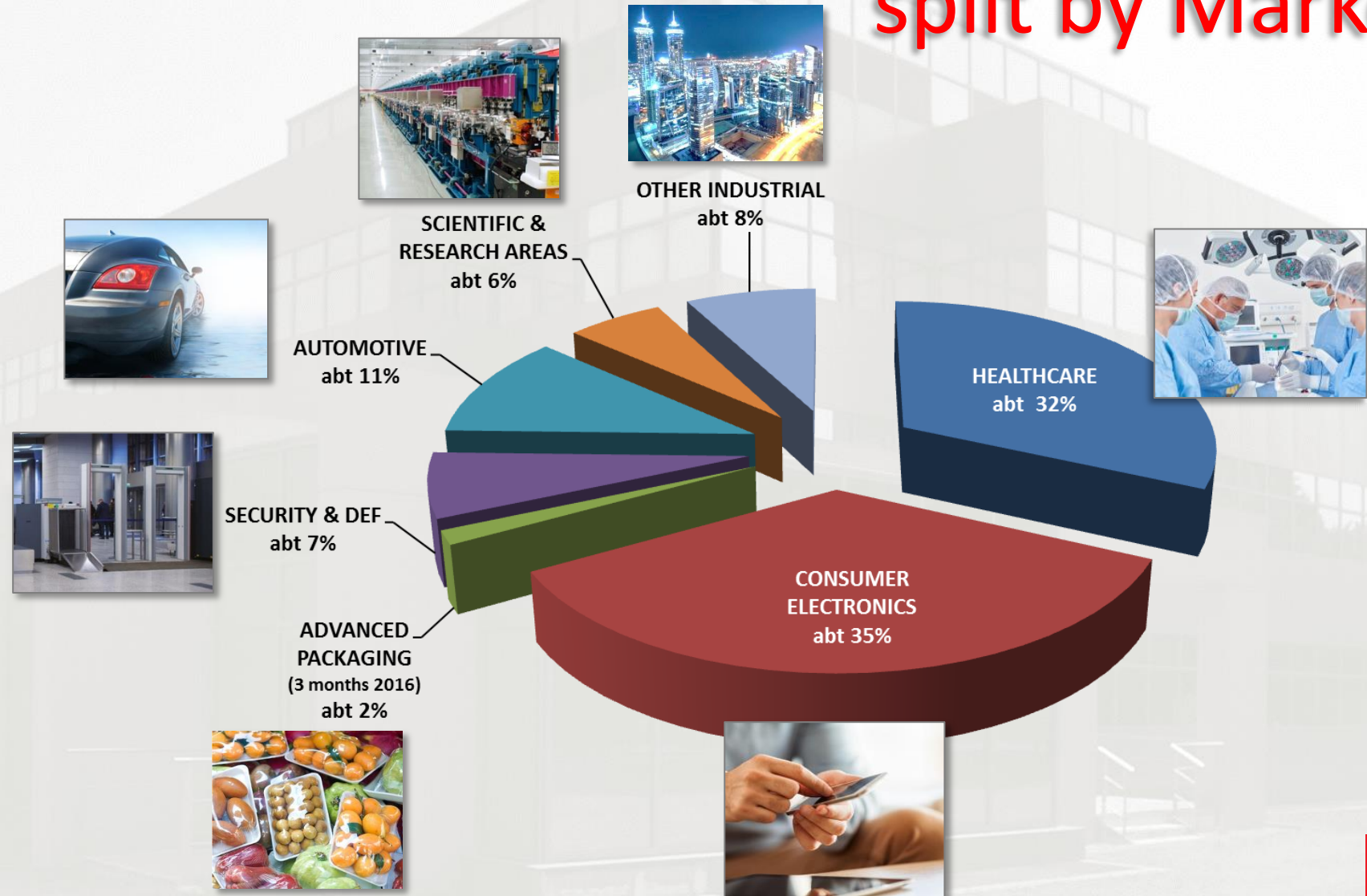
SYSTEMS - complex products

that use proprietary materials and components as active elements to perform the function for which they were designed.

- Getters
- Alkali and other Metal dispensers
- Nitinol components
- Polymeric composites
- Coated films
- Dispenser Cathodes
- and more

- Vacuum pumps
- Gas Purifiers
- Electro-mechanical actuators
- Fluid-dynamic valves
- and more

SAES Group Total Revenues split by Market



Business Organization

INDUSTRIAL APPLICATIONS

- Getters & Dispensers
- Solutions for Vacuum Systems
- Sintered Components for Electronic Dev. & Lasers
- Systems for Gas Purification & Handling

SHAPE MEMORY ALLOYS

- Nitinol for Medical Devices
- SMA for Thermal & Electro Mechanical Devices

ADVANCED PACKAGING

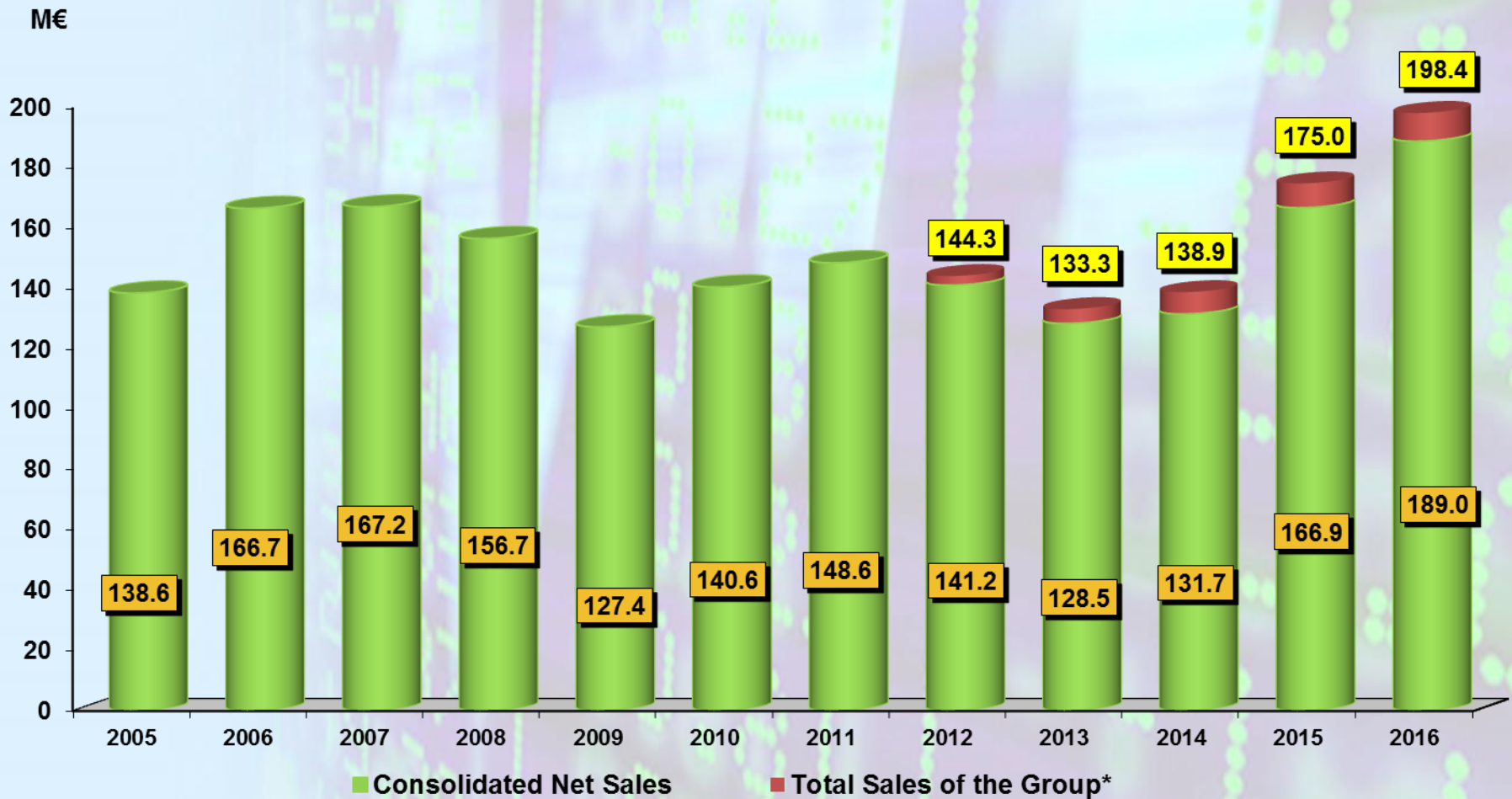
- Solutions for advanced packaging

BUSINESS DEVELOPMENT

- Organic Solutions for Electronic Devices



SAES Group Sales 2016



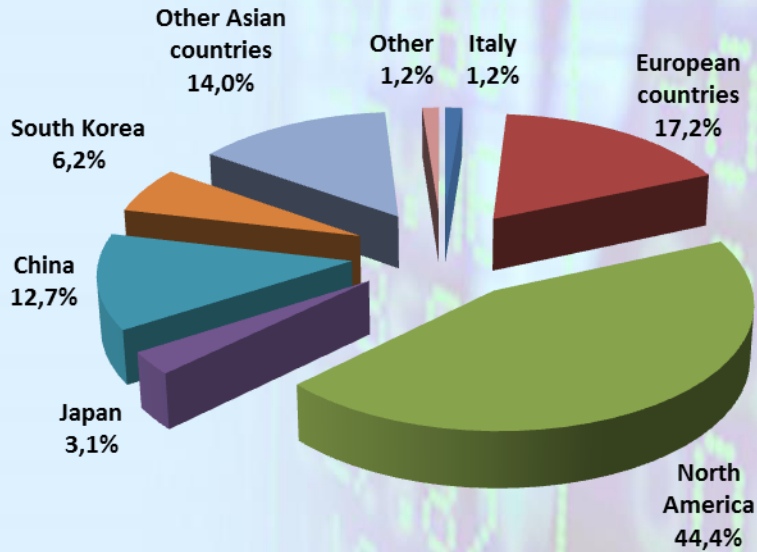
* Achieved by incorporating the 50% joint venture Actuator Solutions and the 49% joint venture SAES RIAL Vacuum S.r.l. with the proportional method instead of the equity method

making innovation happen, together

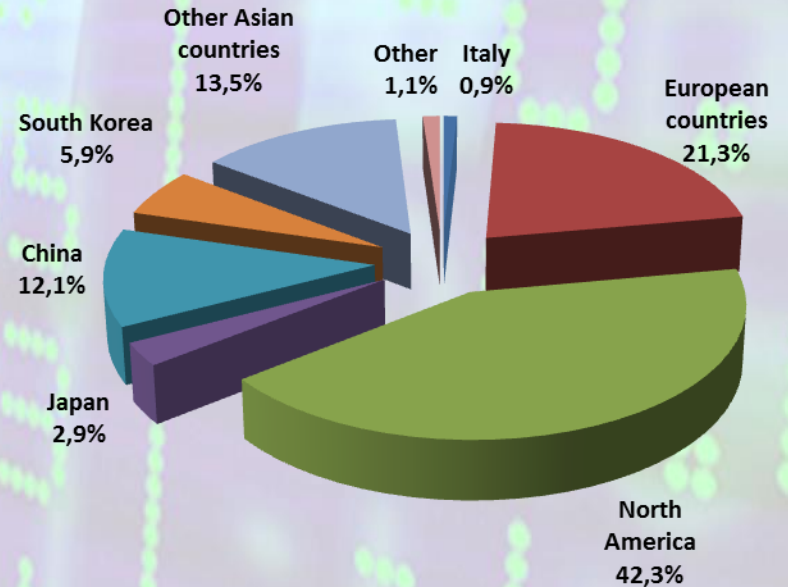


SAES Group Sales 2016

Consolidated Net Sales
by Geographic Area



Total Revenues of the Group
by Geographic Area



Thank you for your attention

**saes
group**

www.saesgroup.com